

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

<b>In the Matters of</b>	)	
	)	
<b>Rural Health Care Support Mechanism</b>	)	WC Docket No. 02-60
	)	
<b>Promoting Telehealth and Telemedicine in Rural America</b>	)	WC Docket No. 17-310
	)	
<b>Schools and Libraries Universal Service Support Mechanism</b>	)	WC Docket No. 02-6
	)	

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**Written Ex Parte Submission of Quintillion Subsea Operations, LLC**

Quintillion Subsea Operations, LLC (Quintillion) submits this *ex parte* to supplement the record in the above-captioned Universal Service Fund (USF) proceedings for Rural Health Care (RHC) and E-Rate (formerly, Schools and Libraries). Based on its experience operating in the

Alaskan telecommunications market since the launch of its subsea and terrestrial fiber network in December 2017, Quintillion identifies market failures within the RHC and E-Rate programs. Quintillion also outlines potential steps the Federal Communications Commission (FCC or Commission) can take to address these market failures and maximize USF support for Alaskans.

## **I. Executive Summary**

Since 2012, the Commission's RHC Telecom Program has doubled funding in Alaska and E-Rate Internet funding has increased more than five times. The increased funding now threatens the overall budgets for the program and one carrier, GCI, receives more than 75% of these USF funds. The Commission cut GCI's 2017 RHC funding by 26%, questioning the cost-effectiveness of the company's rates. Now, the Commission needs to go further to scrutinize GCI's dominance over broadband services in rural Alaska, and to ensure that USF beneficiaries receive the most cost-effective service available.

Unfortunately, the RHC and E-Rate program's safeguard of competitive bidding is doing little to drive down the cost of these services. Roughly 50% of funded E-Rate Internet commitments in Alaska received only one bid. The higher costs resulting from the lack of competitive bidding is compounded by the ability to renew service contracts for multiple years without competitive bidding in both RHC and E-Rate. GCI's market dominance resulted, in part, from the carrier's satellite, microwave, and terrestrial fiber network receiving \$44 million federal BIP grants. Today, GCI refuses to utilize other more cost-effective network solutions, like Quintillion's terrestrial fiber, that would increase available bandwidth, reduce latency, improve service quality, and provide the same or lower cost per megabit compared to GCI's microwave or satellite backhaul services.

To address the RHC and E-Rate market failures, the Commission should take a fresh look at these programs through both rulemakings and audit investigations. First, the Commission should

act on the outstanding RHC rate guidance petitions to consider more cost-effective middle-mile and backhaul solutions. Second, the Commission should act on the outstanding RHC rulemaking proceeding to: 1) allow service providers a more reasonable 90-day period to review service requests; 2) limit single-bid awards to only one funding year; and, 3) improve flexibility of service provider substitution for single-bid awards to allow applicants to choose more cost-effective solutions during the funding year. Third, the Commission should immediately initiate a rulemaking proceeding in E-Rate to: 1) allow service providers a more reasonable 90-day period to review service requests; 2) require single-bid awards to submit cost and rate information that will be made public; and 3) limit single-bid awards to only one funding year. Finally, the Commission should use its permissive audit authority to investigate single-bid RHC and E-Rate awards in Alaska for cost effectiveness. Following the audit, any services not determined cost-effective should be immediately reopened to enable the applicant to select more cost-effective services.

## **II. Background**

### *A. Alaska Market Failures in Rural Health Care and E-Rate*

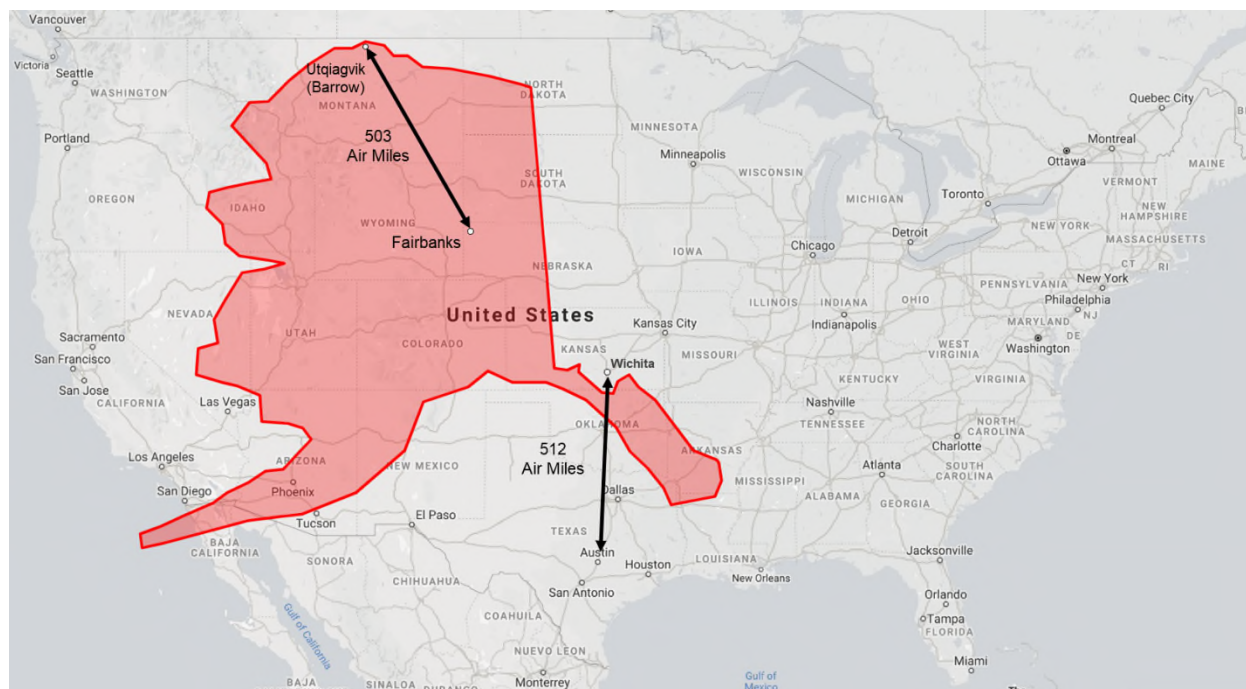
As diverse broadband applications across healthcare, telemedicine, and education have improved outcomes for its users, demand for high-speed, low-latency broadband Internet access services has grown at exponential rates. While demand grows, Alaska has one of the lowest broadband deployment rate of any state in the United States, 80.5% compared to the national average of 93.5%; and only 51.6% in rural areas.<sup>1</sup> Further, Alaska's subscription rate is only 65.8%.<sup>2</sup>

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<sup>1</sup> *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238, Report, FCC 19-44, at Appendix 1, 45 (2019) (2019 Broadband Deployment Report).

<sup>2</sup> *Id.* at Appendix 8, 318.

*Figure 1 – True Size of Alaska*



Alaska's vast expanse and harsh terrain and climate make rural broadband deployment extremely difficult and expensive. To provide broadband to Utqiagvik (Barrow), terrestrial networks must cover 503 air miles, approximately the same as the distance from Wichita, Kansas, to Austin, Texas. It is easy to imagine how expensive broadband service would be in Wichita if all traffic had to be backhauled through Austin! These realities have led to increased requests for Universal Service support from both the Rural Health Care and E-Rate programs to deploy broadband capable of servicing Alaskan hospitals, schools, and similar anchor institutions. Specifically, both the Rural Health Care Program and E-Rate Program have seen significant growth in funding commitments in Alaska.

Figure 2 – Alaska RHC Telecom Program & E-Rate Commitments

Year	RHC Telecom Program Commitments <sup>3</sup>	E-Rate Internet Commitments <sup>4</sup>
2017	\$ 86,425,906	\$ 92,898,224
2016	\$ 121,946,297	\$ 83,227,921
2015	\$ 98,918,764	\$ 71,520,418
2014	\$ 71,752,287	\$ 15,255,356
2013	\$ 64,434,176	\$ 14,063,281
2012	\$ 53,282,180	\$ 15,197,591

This spike in demand for USF support has resulted in the pro-rating of commitments and led to an increase in the budget for the Rural Health Care Program.<sup>5</sup> The Wireline Competition Bureau (WCB or Bureau) had to take further action this past year to address demand in the Rural Health Care’s Healthcare Connect Fund, which supports new construction and recurring service agreements for broadband.<sup>6</sup> The resulting conflict between the limited amount of USF support

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<sup>3</sup> Universal Service Monitoring Report, Supplemental Table S.5.1, Rural Health Care Commitments. For 2017, this information as of September 2018 reflects only \$ 904,535 in Telecom Program commitments. The 2017 commitment total of \$ 86,425,906 comes from USAC public data. USAC, *Rural Health Care Commitments*, <https://rhc.usac.org/rhc/public/searchCommitment> (last visited May 9, 2019).

These figures reflect the Commission’s recent action cutting GCI’s commitments, without which the total RHC Telecom Program commitment for 2017 would be \$109,346,312.76. *FCC Enables Alaska Carrier to Get \$78M in Rural Health Care Funding*, Press Release, <https://docs.fcc.gov/public/attachments/DOC-354494A1.pdf>, (Oct. 10, 2018) (cutting GCI reimbursements for 2017 by 26%).

<sup>4</sup> Universal Service Monitoring Report, Supplemental Tables S.4.1, E-Rate Commitments.

<sup>5</sup> See *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Report and Order, 33 FCC Rcd 6574, 6584, para. 23 (2018) (“For FY 2018, based on GDP-CPI, the RHC Program funding cap will be \$581 million.”) (2018 RHC Order).

<sup>6</sup> See *Rural Healthcare Support Mechanism*, WC Docket No. 02-60, Order, FCC 19-45, para. 4 (2019) (2019 HCF Cap Order).

available for these programs and the growing demand has strained the USAC application processes, with applicants waiting over a full calendar year for funding commitments.<sup>7</sup>

A review of funded commitments in both E-Rate and RHC using the publicly available USAC data as May 9, 2019, reveals that the vast majority of committed funds in Alaska are being paid to a single carrier, namely GCI. The Bureau has recently called into question the rates that GCI charges to Alaskan healthcare providers.<sup>8</sup> The dominance of GCI in the Alaskan USF market is striking, and undermines the goal of the Commission's competitive bidding rules to assure reasonable prices for supported services.

*Figure 3 – Alaskan RHC Telecom Program & E-Rate Funded GCI FRNs*

Year	RHC Telecom Program <sup>9</sup>	GCI Share	E-Rate <sup>10</sup>	GCI Share
2018	no data	no data	\$65,172,774	80.59%
2017	\$65,235,003	75.48%	\$71,639,407	77.64%
2016	\$85,359,463	78.71%	\$63,716,734	78.57%

GCI has faced little if any competitive pressure to reduce its rates. Indeed, from 2016 to 2018, roughly 50% of funded E-Rate FRNs in Alaska for data transmission/internet connections

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<sup>7</sup> See Benton Foundation White Paper, WC Docket No. 02-6, at 7, <https://www.fcc.gov/ecfs/filing/10311114424197> (filed March 11, 2019) (describing the delays facing applicants in processing E-Rate funding commitments for special construction projects); Alaska Communications Ex Parte, WC Docket No. 02-60, at 2, <https://www.fcc.gov/ecfs/filing/10520129131927> (filed May 20, 2019) (discussing the delays in USAC posting necessary forms to enable service providers to sign agreements resulting in missed deadlines and delays in funding eligible commitments).

<sup>8</sup> See *FCC Enables Alaska Carrier to Get \$78M in Rural Health Care Funding*, Press Release, <https://docs.fcc.gov/public/attachments/DOC-354494A1.pdf>, (Oct. 10, 2018) (cutting GCI reimbursements for 2017 by 26%).

<sup>9</sup> USAC, *Rural Health Care Commitments*, <https://rhc.usac.org/rhc/public/searchCommitment> (last visited May 9, 2019).

<sup>10</sup> USAC, *Download FCC Form 471*, <https://data.usac.org/publicreports/Forms/Form471Detail/Index> (last visited May 9, 2019) (analyzing funded internet connection commitments).

received only a single bid.<sup>11</sup> Furthermore, because E-Rate services are considered “publicly available rates” that can be used to justify the RHC rural rate,<sup>12</sup> the lack of competition for E-Rate services compounds the difficulty of monitoring GCI’s RHC claims.

### *B. Quintillion Cable System*

The Quintillion cable system consists of 1,687 miles of subsea and terrestrial fiber optic cable on the North Slope of Alaska. The system is part of a three-phased construction that will connect the communities of the North Slope with terrestrial fiber directly to Asia, Canada, and the United Kingdom. On December 15, 2017, Quintillion completed Phase 1 of its build and connected the communities of Nome, Kotzebue, Point Hope, Wainwright, and Utqiagvik (Barrow) with a 1,200-mile submarine fiber optic cable main trunk line.<sup>13</sup> This fiber trunk connects through Prudhoe Bay over Quintillion’s terrestrial fiber cable system to Fairbanks. At Fairbanks, Quintillion’s fiber connects to existing networks to reach Internet exchange points in Portland and Seattle. The fiber network brings connection speeds of 200 gigabits per second to the villages, among the fastest rates in the country.

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<sup>11</sup> *Id.*

<sup>12</sup> WCB issues guidance to provide certainty and assist service providers and rural health care providers in complying with the Commission's Rural Health Care Program rules, including rules for determining rural rates in the Telecommunications Program, WC Docket No. 02-60, Public Notice, DA 19-92, at 4 (WCB 2019) (2019 Rural Rate PN) (provides guidance on complying with Rural Healthcare program rules, including the Commission's rules for determining rural rates in the Telecommunications Program).

<sup>13</sup> Quintillion, System, <http://qexpressnet.com/system/> (last visited June 5, 2019); *see infra*, Figure 4 - Quintillion Fiber System in Alaska.

*Figure 4 – Quintillion Fiber System in Alaska*



In Phase 2, Quintillion will construct the Pacific segment to extend the backbone cable from the Nome branching unit west to Asia, with options for additional branches into Alaska.<sup>14</sup> Phase 3, the Canada-United Kingdom segment, will extend the subsea system east of Prudhoe Bay along the Lower Northwest Passage to Canada and on to the United Kingdom. While the planning and implementation for Phase 2 and 3 are ongoing, Quintillion has provided middle-mile terrestrial transport for the Arctic Slope Region since the end of 2017. This system in connection with existing fiber links from Fairbanks to the United States provides gigabit/terabit broadband speeds to the communities of Nome, Kotzebue, Point Hope, Wainwright, and Utqiagvik (Barrow). Quintillion currently offers access through wholesale middle-mile and backhaul service agreements with access network providers like Arctic Slope Telephone Association Cooperative,

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<sup>14</sup> Quintillion, *System*, <http://qexpressnet.com/system/> (last visited June 5, 2019).



Inc. (ASTAC) and Alaska Communications. Quintillion offers these services, with far greater potential capacity to clients, at rates 50% to 90% lower, on a cost-per-megabit basis, than competitive satellite and microwave systems.<sup>15</sup>

### **III. The Unique Conditions of Rural Alaska Require Special Consideration**

#### *A. Current USF Cost-Control Mechanisms Have Proven Inadequate*

The Commission has frequently stressed the need to ensure fiscal responsibility in the Universal Service program, and to detect and prevent waste, fraud, and abuse.<sup>16</sup> Rural Alaska presents a specific and unique challenge in this regard, not only because of the geographic facts that cause the cost of service to be particularly high, but also because of the dominance of the market by a single carrier and the absence of competitive bids for most services.

The Commission and Bureau have already recognized the need for greater attention to RHC pricing. Earlier this year, the Bureau released guidance on appropriate rural rates for the RHC Telecommunications Program.<sup>17</sup> This guidance recognized the limited incentives for HCPs to

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<sup>15</sup> See ASTAC Comments to GCI Application for Review, WC Docket No. 17-310, at 15, [link](#) (filed Feb. 4, 2019) (stating Quintillion’s rates for bandwidth on its undersea cable network are in most cases more than 50% lower than GCI’s tariffed TERRA rates and its publicly available satellite rates).

<sup>16</sup> *FCC Seeks Comment on Promoting Fiscal Responsibility in the USF*, WC Docket No. 06-122, Notice of Proposed Rulemaking, FCC 19-46, at 2, para. 3 (2019) (initiating review of USF spending to fulfill “obligation to safeguard the USF funds ultimately paid by ratepayers, and to ensure the funds are spent prudently and in a consistent manner across all programs”); *Lifeline and Link Up Reform and Modernization et al.*, Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962, 4007, para. 128 (2016) (“[t]he Commission’s key objectives for the National Verifier are to protect against and reduce waste, fraud, and abuse; to lower costs to the Fund and Lifeline providers through administrative efficiencies; and to better serve eligible beneficiaries by facilitating choice and improving the enrollment experience.”); *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 17663, 17864-66, paras. 622-29 (2011) (Reaffirming the Commission’s commitment to combatting waste, fraud, and abuse by instituting strong, random audits in the High Cost program).

<sup>17</sup> *Wireline Competition Bureau Seeks Additional Comment on Determining Urban and Rural Rates in the Rural Health Care Program*, WC Docket No. 17-310, Public Notice, 33 FCC Rcd 11707 (WCB 2018) (seeking additional comment on discrete issues raised in the Rural Health Care Notice of Proposed Rulemaking related to determining the urban and rural rates used to calculate support in the Telecommunications Program); see *2019 Rural Rate PN* (provides guidance on complying with Rural

select the lowest cost service. “The fact that a health care provider ‘using the rural-urban differential pays only the urban rate’ creates ‘little incentive to control the overall cost of the service (i.e., the rural rate)’ given that ‘[a]ny increases in the overall cost of the service are borne directly by the Fund ... .”<sup>18</sup> Thus, preventing waste, fraud, and abuse in the RHC Telecom Program relies on reasonable rates being charged by service providers as the Fund bears the responsibility for paying the difference between urban rates and rural rates.<sup>19</sup> These limited incentives have caused greater and greater funding requests to stress the limits of the RHC fund. A surprisingly large percentage of these funding demands have come from Alaska.

The recent RHC rural rate guidance does not necessarily result in HCPs selecting the lowest cost service. As discussed by the Bureau, HCPs select the most “cost-effective method” of providing service, which means the “method that costs the least after consideration of the features, quality of transmission, reliability, and other factors that the health care provider deems relevant to choosing a method of providing the required health care services.”<sup>20</sup> While cost must be the highest weighted consideration, FCC Form 465 allows HCPs to weight cost lower than the aggregate of other considerations.<sup>21</sup> For example, an HCP could use following five factors to evaluate bids and be compliant with the programs rules: 1) Cost 40%, 2) Bandwidth 15%, 3) Quality of Transmission 15%, 4) Reliability 15%, and 5) Technical Support 15%. Thus, even though no other criterion is weighted more than cost, the *aggregate* of other service characteristics

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Healthcare program rules, including the Commission's rules for determining rural rates in the Telecommunications Program).

<sup>18</sup> 2019 Rural Rate PN, at 2 (quoting *Rural Health Care Support Mechanism*, WC Docket No. 02-60, Report and Order, 27 FCC Rcd 16678, 16718, para. 87 (2012) (*Healthcare Connect Fund Order*)).

<sup>19</sup> *Id.*

<sup>20</sup> 47 C.F.R. § 54.603(b)(4).

<sup>21</sup> 47 C.F.R. § 54.642(c),(d).

are given more weight than cost, so the HCP is under no obligation to select the lowest-cost service, even assuming it received more than one bid.<sup>22</sup> Of course, in a single-bid situation, the HCP has no ability to choose a lower-cost service.

Similarly, the three accepted methods for calculating rural rates are difficult to apply effectively in Alaska. These are Method 1 – the average of rates charged to non-healthcare providers; Method 2 – averaging tariffed and other publicly available rates in the same area (Bureau cites to E-Rate Open Data); and Method 3 – cost-based rural rate approved by the Commission/State.<sup>23</sup> Method 1 is usually inapplicable in Alaska due to the limited demand for Business Data Services, which is the service to which most HCPs subscribe.<sup>24</sup> The lack of comparable end-to-end services leads to difficulty identifying the average of rates charged to non-healthcare providers.<sup>25</sup> Method 2 shares equal problems as the Commission has detariffed nearly all of the services provided to HCPs,<sup>26</sup> and E-Rate services are often provided by the same carrier as RHC services, leading to the “reasonableness” standard being the carrier’s own rates.<sup>27</sup>

This leaves Method 3 as the remaining option to demonstrate reasonable rural rates. This relies on completing a cost study, but lacks important guidance. The existing *2019 Rural Rate PN* and other available guidance does not identify permissible or impermissible costs. It does not

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<sup>22</sup> USAC, *Submit Funding Requests*, <https://www.usac.org/rhc/healthcare-connect/individual/step06/> (last visited May 22, 2019).

<sup>23</sup> *2019 Rural Rate PN*, at 3-6.

<sup>24</sup> GCI Petition for Reconsideration, WC Dockets No. 02-60, 17-310, at 10-13, <https://www.fcc.gov/ecfs/filing/1031863684439> (filed Mar. 18, 2019) (*GCI Rural Rate Recon*).

<sup>25</sup> *Id.*; Alaska Communications Response to Telecom Program PN, WC Dockets. 02-60, 17-310, at 2, <https://www.fcc.gov/ecfs/filing/1031320651927> (filed Mar. 13, 2019);

<sup>26</sup> *See Business Data Services in an Internet Protocol Environment*, Report and Order, 32 FCC Rcd 3459, 3557, para. 237 (2017) (“BDS Order”); *Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers*, 2018 WL 5311437, \*1-2, paras. 1-4 (Oct. 23, 2018) (detariffing BDS for rate-of-return carriers receiving high cost support).

<sup>27</sup> *See supra* Figure 3.

identify permissible cost allocation methodologies such as how to handle non-revenue based allocations. It does not identify a permissible rate of return a service provider can receive. This leaves a regulatory black box as the Bureau and USAC are left to make value judgements on tens of millions of dollars being committed to Alaskan RHC service providers. Further, the permissible rate of return is an important factor for GCI and similarly situated carriers that received large loan and grant commitments from federal programs. Specifically, Alaska received \$138.8 million in funding from the Broadband Technology Opportunity Program (BTOP), State Broadband Data & Development (SBDD) and Broadband Initiatives Program (BIP) to deploy broadband infrastructure following the American Recovery and Reinvestment Act (ARRA, P.L. 111-5).<sup>28</sup> GCI received \$44 million in grants from BIP in addition to the loan amounts to construct its TERRA network that it now uses for some of its awarded RHC commitments.<sup>29</sup> When calculating a permissible rate of return, carriers should be required to consider the capital savings from federal and state subsidy programs.

The RHC Healthcare Connect and E-Rate programs have a somewhat stronger incentive for the beneficiary to select a lower-cost option, because in these programs the beneficiary pays a percentage of the carrier's overall price. However, this incentive is only effective when the customer receives multiple bids, which has often not been the case in Alaska, and has the resources to evaluate those bids effectively.

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<sup>28</sup> See NTIA, *Expanding Broadband Access and Adoption in Communities Across America*, Overview of Grant Awards, Report, at 26, [link](#) (December 14, 2010); CRS, *Distribution of Broadband Stimulus Grants and Loans: Applications and Awards*, Report No. R41164, at 9, [link](#) (Jan. 4, 2011).

<sup>29</sup> See GCI Liberty, *GCI SUBSIDIARY AWARDED \$88 MILLION IN FEDERAL BROADBAND STIMULUS FUNDING*, <http://ir.gciliberty.com/news-releases/news-release-details/gci-subsiary-awarded-88-million-federal-broadband-stimulus> (Jan. 25, 2010).

Alaskan E-Rate demand, like the RHC program, is both growing rapidly and heavily dominated by GCI. The USF monitoring report shows a \$56,265,062 increase in E-Rate commitments from 2014 to 2015; spending levels in Alaska now are more than five times greater than they were before 2015.<sup>30</sup>

*Figure 5 – Alaskan E-Rate Form 471 Funded FRNs  
for Data Transmission/Internet Access as of May 9, 2019*

Year	Discounted Commitments <sup>31</sup>
2018	\$ 80,871,070.68
2017	\$ 92,272,514.17
2016	\$ 81,092,050.30
2015	\$ 71,520,418.72
2014	\$ 15,255,356.26
2013	\$ 14,063,281.31

However, like the RHC Telecom Program, the E-Rate competitive bidding rules are not driving down costs. Alaska does not require RFPs for FCC Form 470 submissions. This allows schools to select carriers as soon as 28 days after filing FCC Form 470. This short period does not allow carriers to develop the necessary engineering plans to ensure the lowest cost service is being used. The limited time and lack of competitive bidding is likely resulting in higher cost services being delivered to E-Rate funded schools.

*B. Reforms to Encourage Competitive Bidding Could Benefit Rural Alaskans by  
Creating an Incentive for Investment*

For commitments on Alaska’s North Slope, the current RHC and E-Rate services could be dramatically improved through fiber middle-mile and backhaul services. However, the current

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<sup>30</sup> Universal Service Monitoring Report, Supplemental Tables S.4.1, E-Rate Commitments.

<sup>31</sup> USAC, *Download FCC Form 471*, <https://data.usac.org/publicreports/Forms/Form471Detail/Index> (last visited May 9, 2019) (analyzing funded internet connection commitments from 2016 to 2018). Historic data for FY2015 to FY2013 was compiled from the Universal Service Monitoring Report. *See* Universal Service Monitoring Report, Supplemental Tables S.4.1, E-Rate Commitments.

RHC and E-Rate funded services rely on microwave and satellite middle-mile services that are more expensive on a per megabyte basis for lower bandwidths and higher latencies. The communities surrounding Nome, Kotzebue, Point Hope, Wainwright and Utqiagvik (Barrow) currently have multi-year commitments in both RHC and E-rate that remove the economic incentives to bring improved value and capacity to the RHC and E-Rate applicants. Without reconsidering and reopening these multi-year commitments, there is little to no economic incentive to bid or extend fiber infrastructure, like Quintillion's Cable Landing Stations (CLS's) deeper into the Alaskan North Slope and Northwest Arctic territories. The lack of access to the reasonable and cost-effective support mechanisms of RHC and E-Rate prevents further investment in the Alaskan North Slope and Northwest Arctic territories, which have been designated as Opportunity Zones under recent tax legislation.<sup>32</sup> The use of multi-year commitments have removed the needed economic incentives for fiber providers, like Quintillion or its wholesale clients, to bid and then deploy network assets to RHC and E-Rate applicants who are receiving substantially more expensive and inferior service than fiber service can provide.

#### **IV. FCC Regulatory Authority to Correct Market Failures and Proposed Remedies to Maximize Universal Service Support**

##### *A. Rural Healthcare Proceedings*

The Commission and the Bureau have an opportunity to act quickly to modify and clarify existing guidance and rules to address the above-documented market failures in Alaska RHC. GCI

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<sup>32</sup> Tax Cuts and Jobs Act of 2017, Pub. L. No. 115-97, 131 Stat. 2015 (2017) (codified as amended at 26 U.S.C. § 11001, *et seq.*) The legislation added Opportunity Zones, 26 U.S.C. 1400Z-1 *et seq.*, to identify an economically-distressed communities where new investments, under certain conditions, may be eligible for preferential tax treatment. Localities qualify as Opportunity Zones if they have been nominated for that designation by the state and that nomination has been certified by the Secretary of the U.S. Treasury via his delegation of authority to the Internal Revenue Service. *See IRS, Opportunity Zones FAQ*, <https://www.irs.gov/newsroom/opportunity-zones-frequently-asked-questions> (Apr. 17, 2019).

filed a timely Petition for Reconsideration of the *2019 Rural Rate PN* that asks the Bureau to broadly reconsider offered guidance.<sup>33</sup> The Bureau should act on this petition in light of the unique circumstances of the Alaskan telecommunications market and provide guidance that would specifically account for the entrance of new competitive services. As currently constructed, the Method 1 and 2 guidance would not consider the Quintillion network as a comparable service rate as it does not provide end-to-end services.<sup>34</sup> However, this rate analysis would ignore the substantially more affordable interconnection and backhaul services Quintillion is now providing to the Arctic Slope communities. Specifically, if GCI or another access provider used Quintillion's fiber network, the new network cost structure would eliminate expensive satellite transponder and microwave backhaul costs and substitute the more cost-effective and higher-bandwidth Quintillion fiber backhaul. For example, North Slope communities such as Nome, Kotzebue, Point Hope, Wainwright, Utqiagvik (Barrow), and Nuiqsut would realize substantial cost savings if Quintillion's middle-mile rates were considered in calculating their RHC funding. Based on our analysis of the USAC FRN data, Quintillion offers comparable middle-mile services with higher bandwidth, lower latency, and the same or lower cost per megabit as these communities' current RHC commitments.

The Commission should modify the *2019 Rural Rate PN* to allow carriers to determine rural rates by assembling costs for distinct commercial services provided by the carrier or through other publicly available sources.<sup>35</sup> USAC should only accept rates for service components

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<sup>33</sup> See *GCI Rural Rate Recon.*

<sup>34</sup> *2019 Rural Rate PN*, at 3.

<sup>35</sup> See *Id.* at 3-4. (Explaining carriers must use "the entire cost or charge of a service, end-to-end, to the customer . . . [and] not rates for particular facilities or elements of a service." USAC cannot accept a purported rate derived by, for example, piecing together different service provider charges for different

(transport, local access networks, etc.) that have actual subscribers and are similarly situated to the services being provided to the HCP. To determine if the service is similarly situated, USAC should consider population density of the HCP area in addition to the “functional equivalence” test described in the *2019 Rural Rate PN*.<sup>36</sup> Further, as USAC collects rural rate cost information, USAC should make the information public to ease the burden on service providers attempting to determine future rural rates through its Open Data Platform.<sup>37</sup>

In addition to acting on the pending petition for clarification, the Bureau should use the lessons learned from the rural rate proceedings and adopt programmatic changes to the RHC Fund. The Commission has not gone to order on *Promoting Telehealth in Rural America NPRM*.<sup>38</sup> Quintillion applauds and recognize the efforts of the Bureau thus far and believe it is the right time to act and take a fresh look at the program. Comments closed in March 2018 and the renewed comment period on rural rates closed in January 2019. The Commission has a substantial record to improve the functions of the RHC Funds. Specifically, the Commission proposed making cost the primary factor in determining which RHC bid should be selected.<sup>39</sup> The rural rate proceeding demonstrates the wisdom of this proposal. Further, the competitive bidding process needs to allow for longer consideration of proposals to give service providers time to effectively design solutions to achieve the lowest cost. Specifically, the Commission should modify 47 CFR §§ 54.603, 54.642

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service components (e.g., transport, local loop) that are not sold to a commercial customer as an end-to-end service.).

<sup>36</sup> *Id.* at 4.

<sup>37</sup> *See id.* (referencing the E-Rate Open Data Platform that includes a database of service information including cost and rate information).

<sup>38</sup> *Promoting Telehealth in Rural America*, WC Docket No. 17-310, NPRM, 32 FCC Rcd 10631 (2017) (*RHC NPRM*).

<sup>39</sup> *RHC NPRM*, 32 FCC Rcd at 10659, para. 84.



to allow at least 90 days from the posting of the service request to selection of service provider.<sup>40</sup> This increased period will allow all service providers appropriate time to evaluate and design cost-effective solutions to service requests.

Further, the Commission should adopt rules specific to single-bid awards. Without the competitive bidding process to drive down service costs, there is little incentive for applicants or service providers to select the most cost-effective solution. To curb waste, fraud, and abuse concerns associated with single-bid awards, the Commission should modify the multi-year commitment rules to apply only to awards with multiple bids. Specifically, 47 CFR §§ 54.642(h)(4), 54.644(b) should be modified to apply only to awards made on requests that receive more than one bid.

#### *B. Initiate E-Rate Rulemaking Proceeding*

The Commission should promptly begin an E-Rate rulemaking proceeding to address the current market failures in Alaska. The rulemaking should focus on improvements to the competitive bidding rules and cost-effectiveness of single-bid, multi-year funding commitments. The Commission should release a Notice of Proposed Rulemaking with the goal of releasing a final Order by mid-2020. Principally, changes to extend the competitive bidding window of service providers, cost controls on single-bid awards, and limiting single-bid awards to a single year should be considered. These changes would increase competitive bidding by allowing service providers more time to develop cost-effective solutions to service requests and curb waste, fraud, and abuse concerns associated with single-bid awards by limiting the commitments to a single year. The result of these changes would lower costs for applicants and increase the availability of E-Rate funding for additional commitments.

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<sup>40</sup> 47 CFR §§ 54.603(b)(3), 54.642(g).

The Alaskan E-Rate market can benefit from the work the Bureau and Commission have done to better understand the competitive telecommunications landscape in Alaska. As stressed above, the E-Rate competitive bidding process and service selection could benefit from the RHC lessons, namely regarding rate determinations. The Commission should use this opportunity to begin a rulemaking focused on the competitive bidding process and specifically the oversight of single-bid, multi-year funding requests. While competitive bidding should drive down costs of services, this is not happening for 50% of the E-Rate funded data transmission/Internet connection FRNs. Without the safeguard of competitive bidding, the E-Rate program is reliant on USAC expertise in determining if costs are appropriate for the selected services. This process has proven unreliable in the RHC context as the rural rate proceeding has demonstrated. The problem grows when single-bid service agreements run for multiple funding years resulting tens of millions of USF support being spent on rates determined by service providers. This is especially true in Alaska where the market has fewer competitors. With the Bureau questioning the rates being charged by RHC service providers,<sup>41</sup> it is appropriate that the similar services being offered by the same service providers to E-Rate recipients be subject to a similar degree of scrutiny. Instituting rules regarding how rates will be evaluated when no other bid is received will maximize the E-Rate support and provide greater clarity to service providers.

Specifically, the Commission should propose altering 47 CFR §§ 54.503, 54.504 to require additional information when single-bid contracts are selected. § 54.503(c)(4) should be extended from four weeks to 90 days to allow sufficient time for interested service providers to respond to bids. § 54.504(a) should add an additional section requiring cost and rate information to be

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<sup>41</sup> See *FCC Enables Alaska Carrier to Get \$78M in Rural Health Care Funding*, Press Release, <https://docs.fcc.gov/public/attachments/DOC-354494A1.pdf>, (Oct. 10, 2018) (cutting GCI reimbursements for 2017 by 26%).

submitted when single-bid contracts are selected. This cost and rate information should demonstrate the lowest cost services meeting the applicant's needs are being selected and include comparisons to similarly situated services within E-Rate's Open Data Platform. This cost and rate information should be made public under § 54.504(a)(2). Finally, this additional section should limit service contract to a single funding year.

### *C. Direct USAC to Audit E-Rate and RHC Single-Bid Commitments*

The USAC audits safeguard the USF and are the principal tool in identifying and preventing waste, fraud, and abuse. In light of the Quintillion market entry in December 2017, the Bureau should direct USAC through its permissive authority to audit FY18 commitments in rural Alaska to determine the reasonableness of middle-mile rates.<sup>42</sup> Particularly, USAC's efforts should be focused on single-bid, multi-year commitments that represent the biggest risk to the Fund due to the lack of competitive forces. Following the results of these audits, the Commission should strongly consider allowing applicants to substitute services or service providers for more cost-effective solutions.<sup>43</sup> To evaluate the cost-effectiveness of current services being selected on single-bid, multi-year commitments, USAC and the Bureau should consider the amount of capital expenses being recovered through these commitments. As discussed above, Alaskan carriers

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<sup>42</sup> 47 CFR §§ 54.516, 54.619, 54.648; *see RHC NPRM*, 32 FCC Rcd at 10670-71, para. 115 (reiterating the Commission's commit to strong audit protections in RHC); *FCC Modernizes E-Rate Program To Expand Robust Wi-Fi Networks In The Nation's Schools and Libraries. Reforms to Expand Wi-Fi to 10 Million More Students, Thousands of Libraries Nationwide Next Year*, WC Docket No. 13-184, Report and Order, Order, 29 FCC Rcd. 8870, 8975, para. 261 (reiterating the Commission's commit to strong audit protections in E-Rate).

<sup>43</sup> *See Rural Health Care Support Mechanism*, Order, 32 FCC Rcd 7532 (Oct 12, 2017) (WCB waived certain Rural Health Care rules to enable rural health care providers who were served by Network Services Solutions to select a replacement service provider without initiating a new competitive bidding process due to the carrier's bankruptcy); *Rural Health Care Support Mechanism*, WC Docket No. 02-60, 32 FCC Rcd 5463, Order (Jun. 30, 2017) (The Commission waived, sua sponte and on a one-time basis, its Rural Health Care rules for certain Alaskan health care providers with pro-rated commitments to reduce the cost of service).

receive substantial federal assistance to offset the high capital costs to deploy network facilities. USAC and the Bureau should determine the capital expense subsidized by other federal assistance programs for the network assets being used to provision RHC and E-Rate services. If the RHC and E-Rate service costs include capital recovery in addition to the marginal costs to provision the actual end-user service to RHC and E-Rate applicants, these costs should be evaluated with heightened scrutiny to prevent duplicative capital support. Further, if a review concludes the service is not cost-effective, the Bureau should reopen the commitment immediately to allow a more cost-effective solution. This reopening can be accomplished through service or service provider substitution<sup>44</sup> to immediately allow the E-Rate/RHC applicant to select a new, more cost-effective service or service provider. Alternatively, the Commission could require multi-year commitments to be rebid in the next application window.

## **V. Conclusion**

Quintillion reiterates its ongoing support of the Bureau's and Commission's efforts to improve the RHC and E-Rate programs. The work is tireless and often thankless, but ultimately necessary to provide millions of Americans better outcomes at their schools, libraries, and healthcare providers. First, the Commission should act on the outstanding RHC rate guidance petitions to consider more cost-effective middle-mile and backhaul solutions that would lower costs at least 50% on a per megabit basis. Second, the Commission should act on the outstanding RHC rulemaking proceeding to: 1) allow service providers a more reasonable 90-day review period of service requests; 2) limit single-bid awards to only one funding year; and, 3) improve flexibility of service provider substitution for single-bid awards to allow applicants to choose more cost-effective solutions during the funding year. Third, the Commission should promptly initiate

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<sup>44</sup> *See id.*

a rulemaking proceeding in E-Rate to: 1) allow service providers a more reasonable 90-day review period of service requests; 2) require single-bid awards to submit cost and rate information that will be made public; and, 3) limit single-bid awards to only one funding year. Finally, the Commission should use its permissive audit authority to investigate single-bid RHC and E-Rate awards in Alaska for cost effectiveness. Following the audit, any services not determined cost-effective should be immediately reopened to enable the applicant to select more cost-effective services.

Respectfully submitted,

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